



A Comparative Study of Supermarket and Traditional Market Supply Channels of Brinjal in Medak District of Andhra Pradesh

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ABSTRACT

The present investigation was undertaken with a view to assess the marketing system through comparing marketing costs, marketing margins, price spread, producer's share in consumer rupee and marketing efficiency of supermarket supply and traditional market supply channels of brinjal in Medak district of Andhra Pradesh. A sample of 39 growers who are supplying brinjal to supermarkets and 39 growers who are supplying brinjal to traditional markets were selected randomly. Three marketing channels were identified in the study area i.e., Supermarket supply channel I: Farmer- collection centre- distribution centre- retail outlet- consumer, Traditional markets supply channel II: Farmer-commission agent (wholesaler) - retailer-consumer and channel III: Farmer-commission agent -retailer-consumer. The results revealed that among the three marketing channels the producer's share in consumer's rupee and the value of marketing efficiency was highest in supermarket channel I compared to the other two traditional channels. Promotion of competitive agricultural markets in private and cooperative sectors is required to encourage direct marketing and contract marketing programmes that facilitate industries and large trading companies to undertake procurement of agricultural commodities directly from the farmers field and to establish effective linkages between the farm production and retail chains.

Key words : Compative study, Supermarket, Traditional Market.

The production system particularly of perishable commodities like vegetables has been observed to be quite weak link in programmes for increasing vegetable availability and improving farmer's share in the consumer's rupee. Vegetables require a chain of marketing functions before reaching the ultimate consumer and the role of various marketing agencies assumes great importance since most of the vegetable growers sell their produce through commission agents where as quantity of direct sale to consumer is almost negligible. The supply of vegetables by farmers to modern retail outlets brings in new form of organizing production based on consumer demand and the organized food retail ventures were involved in arrangements of procurement without any contracts or commitments, apart from paying better price to the farmers (Sulaiman *et al.*, 2011). The study on marketing aspects provides some guidelines to the policy makers about the need of efficient marketing system and to increase the income of vegetable farmers in the region. Hence the present study was undertaken with the following specific objectives. (1) To study the cost

effectiveness of different channels involved the marketing of vegetables. (2) To assess the price spread and marketing efficiency in the marketing of vegetables through different marketing channels. (3) To analyze the factors affecting the marketing efficiency.

MATERIAL AND METHODS

The present study was taken up in Medak district of Andhra Pradesh. Chinnakodur and Mulugu mandals from Medak district which are involved in supplying of vegetables to modern retail outlets by setting up of collection centers in the production regions and those supplying to the traditional markets were selected for the present study. The respondent farmers were selected from 12 villages (6 villages from each mandal). Thus, a sample of 39 farmers supplying brinjal to traditional markets and 39 farmers supplying brinjal to supermarkets were randomly drawn from the study area making a total sample size of 78 farmers. A sample of 30 intermediaries consisting of wholesalers, commission agents and retailers of 10 each were selected randomly from local markets.

The information was collected on marketing cost, marketing channels, price spread, marketing efficiency and factors affecting marketing efficiency for both supermarket supply and traditional market supply channels of vegetables in the study area. The study refers to the agricultural year 2009-2010.

The multiple linear regression was used to study the effect of marketing cost, marketing margin, transportation cost, open market price, labour wages, no. of market intermediaries and two dummy variables i.e., controlled by middle men, presence of cold storage facilities on dependent variable of marketing efficiency. The regression was run separately for supermarket and traditional channels.

RESULTS AND DISCUSSION

Marketing of agricultural produce is equally important to its production as it is produced at one place and marketed at distant places so the ultimate success in marketing of any commodity largely depends upon the marketing channels of produce. It involves a chain of intermediaries which affects the marketing cost and margins and reduces the producer's share in consumer's rupee. Three marketing channels were identified in the study area. Channel I → (1) Super market supply channel: Farmer collection centre- distribution centre- retail outlet - consumer. (2) Channel - II → Traditional market supply Channel: Farmer-commission agent (wholesaler) - retailer-consumer. (3) Channel- III → Traditional market supply Channel : Farmer-commission agent -retailer-consumer.

The traditional marketing channels involves a number of middlemen each one adding to marketing costs and profit margins, while in supermarket channel there were no middle -men or commission agents involved in marketing of the produce. In this channel vegetables are purchased by the collection centre workers as per the indent under the supervision of quality assessment in-charge. The produce is transported immediately from collection centre to distribution centre and from there the produce which is graded again will be distributed to each retail outlets. The marketing cost, transportation and other labour charges involved to transport the produce from collection centre to distribution centre and from distribution centre to

retail outlets are borne by the procuring agencies. Farmers contracted by retail chains are receiving comparatively higher prices (Dhanjaya and Rao, 2009).

Price spread of Medak district Brinjal farmers

The total marketing cost incurred by brinjal growers amounted for ₹ 121.67 (9.68% of consumer's price) in supermarket channel-I, ₹ 429.24 (27.16% of consumer's price) in channel-II, ₹ 383.21 (28.04% of consumer's price) in channel-III. The total marketing cost incurred by producers was more in traditional channels-II & III and among the various components of marketing cost incurred by growers, transportation cost occupied major share with ₹ 60.80 which accounted for about 4.84 per cent to consumer's price in supermarket channel-I, while in traditional channels-II & III it was ₹ 310.25 (19.63%) and ₹ 280.50 (20.53%) respectively. As the Collection centers are procuring the produce directly from the farmers, Supermarket supply farmers incur much less in transaction compared to independent producers of traditional channels-II & III these findings are inconfirmity with that of (Birthal and Joshi 2007). The other components of marketing cost at producer level were found to be very low than the transportation cost (Table 1).

The total expenses incurred by wholesalers in channel-II was ₹ 191.56 (12.12%) with a margin of ₹ 69.40 (4.39%) whereas the total expenditure incurred at retailer's level was highest in channel-III with ₹ 132.42 compared to ₹ 105.91 in channel-II. The average margin per quintal of vegetables earned by the retailers was to the tune of ₹ 263.59 in channel-II and Rs. 329.92 in channel-III. Similar findings were reported by (Sanjeev *et al.*, 2008). The producer's share in consumer's rupee in supermarket channel-I was higher i.e., (50.99%) when compared to traditional channel-II (32.93%) and channel-III (38.09%). The supermarket channel-I farmers are receiving 12.90-18.06% higher prices for their produce than traditional channel farmers. The higher prices and lower transaction costs (Joseph *et al.*, 2008) at the collection centers indicate that institutional arrangements improve competitiveness of the farmers

Table 1. Comparison of price spread in supermarket and traditional market channels for brinjal farmers in Medak district of Andhra Pradesh. (%/Q)

Particulars	Channel- I	Channel- II	Channel- III
Net price received by the producer	640.38 (50.99)	520.30 (32.93)	520.30 (38.09)
Grading	14.95 (1.19)	10.26 (0.64)	6.80 (0.49)
Packing	12.62 (0.98)	9.40 (0.59)	8.95 (0.65)
Loading and unloading	14.25 (1.00)	12.30 (0.77)	6.88 (0.50)
Transportation	60.80 (4.84)	310.25 (19.63)	280.50 (20.53)
Market fees	-	5.95 (0.37)	5.79 (0.41)
Weighing	9.50 (0.75)	7.00 (0.43)	6.80 (0.48)
Commission	-	57.06 (3.61)	57.06 (4.17)
Spoilage	9.55 (0.76)	17.32 (1.09)	10.43 (0.76)
Subtotal	121.67 (9.68)	429.24 (27.16)	383.21 (28.05)
Producer selling Price to wholesaler	-	949.54 (60.09)	-
Wholesaler purchase price	-	949.54 (60.09)	-
Packing	-	8.55 (0.54)	-
Loading and unloading	-	9.20 (0.58)	-
Transportation	-	130.25 (8.24)	-
Market fees	-	9.20 (0.58)	-
Weighing	-	8.66 (0.54)	-
Commission	-	9.50 (0.60)	-
Spoilage	-	16.20 (1.02)	-
Subtotal	-	191.56 (12.12)	-
Wholesaler margin	-	69.40 (4.39)	-
Wholesaler selling price to retailer	-	1210.50 (76.61)	-
Retailer purchase price	-	1210.50 (76.61)	903.51 (66.15)
Packing	-	6.45 (0.40)	10.50 (0.76)
Loading and unloading	-	9.30 (0.58)	12.10 (0.88)
Transportation	-	55.76 (3.52)	80.55 (5.89)
Telephone	-	15.90 (1.00)	15.40 (1.12)
Spoilage	-	18.50 (1.17)	13.87 (1.01)
Subtotal	-	105.91 (6.70)	132.42 (9.69)
Retailer margin	-	263.59 (16.68)	329.92 (24.15)
Consumer purchase price	1255.89 (100)	1580.00 (100)	1365.85 (100)
Producers share in Consumer rupee	50.99	32.93	38.09

(Figures in parentheses indicate percentages to the respective consumer's price)

Table 2. Comparison of marketing efficiency of Brinjal in supermarket and traditional channels of Medak district of Andhra Pradesh. (‘ /Q)

S.No	Particulars	Channel I Supermarket channel	Channel II Traditional channel	Channel III Traditional channel
1.	Consumer purchase price	1255.80	1580.00	1365.85
2.	Total marketing cost (Rs/q)	121.67	726.71	515.63
3.	Market margins (Rs/q)	-	332.99	329.92
4.	Price received by farmer (Rs/q)	640.38	520.30	520.30
5.	Value added by Marketing system (Rs/q) (1-4)	615.42	1059.70	845.55
6.	Conventional Method (5/2)	5.05	1.45	1.63
7.	Shepherd's Method (1/2)	10.32	2.17	2.64
8.	Acharya's method (4/2+3)	5.26	0.49	0.61

Table 3. Multiple linear regression for factors affecting marketing efficiency of Brinjal in supermarket and traditional channels of Medak district of Andhra Pradesh.

S No. Factors	Channel-I Supermarket channel	Channel-II Traditional channel	Channel-III Traditional channel
Constant			
1. Marketing cost	113.84*** (6.18)	845.84*** (27.66)	848.0*** (27.32)
2. Marketing margin	1.20*** (0.618)	-0.93*** (-0.04)	-0.92*** (-0.04)
3. Transport cost	-	-0.90*** (-0.09)	-0.90*** (-0.09)
4. Open market price	0.06*** (0.023)	-0.04*** (-0.05)	-0.03 (-0.05)
5. Middle men	0.10*** (0.004)	1.12*** (0.03)	1.13*** (0.02)
6. Intermediary	-	-1.46*** (3.43)	-1.22 (3.45)
7. Cold storage	-	-4.72 (4.47)	-4.53 (-4.49)
8. Consumer price	1.23 (0.324)	-	
R ²	-5.69 (1.347)	-0.034 (-0.24)	-0.035** (-0.02)
	0.96	0.95	0.97

(Figures in parenthesis indicates their respective standard errors)

*** Significant at one percent level;

** Significance at five percent level ;

* Significant at ten percent level

Marketing efficiency in Brinjal Marketing

Marketing efficiency for brinjal farmers was found to be 5.26 in channel-I, while in channel-II it was 0.49, where as in channel-III it indicated as 0.61 respectively. The marketing efficiency of supermarket channel-I was higher than the traditional channels because of the systematic market arrangements, low marketing costs, better

maintenance of quality of produce due to cleaning, grading, sorting and packing operations carried out by the institutional arrangements.

Factors affecting marketing efficiency in supermarket and traditional channels

The various factors affecting the marketing efficiency of the brinjal vegetable across different

channels for the Medak district was given in table 3. The results revealed that the marketing cost has positive significant effect on marketing efficiency in supermarket channel-I and negative significant effect in channel-II & III. The coefficients of marketing cost in supermarket channel-I was positively significant. The negative significant coefficients of marketing cost in traditional channels shows that with one per cent increase in marketing cost the marketing efficiency decreases by 0.93 and 0.92 per cent in channels-II & III respectively. In supermarket channel-I there were no intermediaries or middle men participating in marketing of the produce hence no margins were incurred. The regression coefficients of market margins in traditional channels- II & III were negative and statistically significant indicating that with the decrease in market margins marketing efficiency increases.

Transport cost indicated negative significant effect in channel-II indicating that with decrease in transportation cost the marketing efficiency increases. The consumer price shows a negative significant effect on marketing efficiency in channel-III indicating that increase in consumer price the marketing efficiency decreases. It is revealed from the results that market margins, marketing costs, transport costs, open market prices of the produce are the important factors influencing the marketing efficiency. The negative relationship of marketing efficiency with marketing cost and market margins in traditional channels implies that increase in the market margins will squeeze the marketing efficiency.

CONCLUSIONS

It could be inferred from the study that the perishable nature of the vegetables, lack of proper storage facilities and disorganized marketing system in the traditional channels resulted into major share of retailer's margin and higher proportion of marketing cost. The marketing efficiency was found to be highest in supermarket channel-I compared to other traditional channels which implies that super

marketing system has been working at reasonable efficiency looking to the perishable nature of the crop. Task force on agricultural marketing should be set up for promotion of new and competitive agricultural markets in private and cooperative sectors to encourage direct marketing, contract farming programmes, facilitate industries, large trading companies to undertake procurement of agricultural commodities directly from the farmers field and to establish effective linkages between the farm production and retail chains. There is a necessity to integrate farm production with national and international markets to enable farmers to undertake market driven production plan and adoption of modern marketing practices.

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